
**Anne Burnett Marion School of Medicine
at Texas Christian University**

**DiseaseQuest
Use Cases**

Version 2.0

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Revision History

Date	Version	Description	Author
10/07/25	1.0	Initial Use Case document	DiseaseQuest Team
04/15/2026	2.0	Final Use Case	DiseaseQuest Team

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Use Cases

Use Case List

Primary Actor	Use Cases
Admin	UC 1: Create an Admin Account UC 2: The Admin deletes their Admin account UC 3: The Admin edits user accounts UC 4: The Admin invites instructors to register an account UC 5: Admin Delete Instructor UC 6: Admin Find an Instructor UC 7: Admin View an Instructor UC 8: The Admin creates a case UC 9: The Admin/Instructor views a student UC 10: The Admin deletes a student UC 11: The Admin/Instructor views a classroom UC 12: The Admin deletes a classroom UC-34: Admin views Leaderboard
Instructors	UC 13: The Instructor sets up an instructor account UC 14: The Instructor edits their Instructor account UC 15: The Instructor invites students to join DiseaseQuest UC 16: Instructor creates a classroom UC 17: Instructor Views Classroom Roster UC 18: Instructor finds Students UC 19: The Instructor removes a student from a classroom UC 20: The Instructor finds a classroom UC 21: The Instructor edits a DiseaseQuest classroom UC 22: Instructor Views Class Statistics UC 31: Instructor adds a case to a classroom
Students	UC 23: The Student sets up a student account UC 24: Student Edit Account Details UC 25: Student Edit User Account Password UC 26: The Student views introduction UC 27: Student Request a Patient to Begin a Simulation UC 28: Student views evaluation page UC 29: Student Request Labs from Diagnostic Agent UC 30: Student Communicates with Mentor Agent UC 32: Student Edit User Account Details UC 33: The Student/Instructor views Leaderboard

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Use Case 1: Create an Admin Account

UC ID and Name:	UC-1: Create admin account																																	
Created By:	Kavish Soningra	Date Created:	10/01/25																															
Primary Actor:	Admin																																	
Trigger:	Admin selects “Create New Admin Account” from the Admin Dashboard.																																	
Description:	An existing authorized admin (Super Admin) initiates the creation of a new admin account to delegate management of users, configurations, and system data. The new admin will receive an activation email to complete setup.																																	
Preconditions:	PRE-1. Admin is logged in with proper rights.																																	
Postconditions:	POST-1: A new admin account is created in “pending” status. POST-2: The new admin receives a secure activation link via email to set their own password.																																	
Main Success Scenario:	Admin indicates to “Create New Admin Account.” Admin is prompted for name, email, role. Admin enters the information. Validate and ensure email uniqueness The account is created in pending state A secure activation email is sent to the new admin. The new admin completes registration and sets their password. Use case ends.																																	
Extensions:	Duplicate email, invalid data.																																	
Priority:	High																																	
Frequency of Use:	Rare, maybe once a year.																																	
Business Rules:																																		
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>First Name</td> <td>String</td> <td>Yes</td> <td>Admin-only access</td> <td>User</td> </tr> <tr> <td>Last Name</td> <td>String</td> <td>Yes</td> <td>Admin-only access</td> <td>User</td> </tr> <tr> <td>Email</td> <td>String</td> <td>no</td> <td>Must be unique, protected as login credential</td> <td>Email</td> </tr> <tr> <td>Role</td> <td>String</td> <td>no</td> <td>Determines authorization</td> <td>Role</td> </tr> <tr> <td>Password</td> <td>String</td> <td>Yes</td> <td>Encrypted</td> <td>Password</td> </tr> </tbody> </table>				Property name	Data type	Editability	Security/access concerns	Reference to glossary	First Name	String	Yes	Admin-only access	User	Last Name	String	Yes	Admin-only access	User	Email	String	no	Must be unique, protected as login credential	Email	Role	String	no	Determines authorization	Role	Password	String	Yes	Encrypted	Password
Property name	Data type	Editability	Security/access concerns	Reference to glossary																														
First Name	String	Yes	Admin-only access	User																														
Last Name	String	Yes	Admin-only access	User																														
Email	String	no	Must be unique, protected as login credential	Email																														
Role	String	no	Determines authorization	Role																														
Password	String	Yes	Encrypted	Password																														
Related Use Cases:																																		
Assumptions:																																		
Open Issues:																																		

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Use Case 2: Admin deletes their Admin account

UC ID and Name:	UC-2: Admin deletes their Admin account		
Created By:	Dylan Noall	Date Created:	09/29/2025
Primary Actor:	Admin	Secondary Actors:	
Trigger:	The Admin indicates to delete their account		
Description:	The Admin wants to delete their Admin account		
Preconditions:	PRE-1. The Admin is logged into the system.		
Postconditions:	POST-1. The Admin account is removed from the system.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to delete their account. 2. The System alerts the Admin of the consequences of this deletion according to the “Data integrity and deletion rules” defined in the Associated Information of this use case, warns the Admin about the deletion, and asks the Admin to confirm. 3. The Admin confirms the deletion. 4. The System deletes the Admin according to the “Deletion strategy” defined in the Associated Information of this use case. 5. The System returns the user to the home page. 6. Use case ends. 		
Extensions:			
Priority:	High		
Frequency of Use:	Rare. Approximately 2 users, average of 1 usage per 3 years.		
Business Rules:			
Associated Information:	<p>Data integrity and deletion rules:</p> <ul style="list-style-type: none"> • If an Admin has already uploaded rubrics or cases, deleting an Admin <i>will not</i> remove the rubrics or cases. <p>Deletion strategy:</p> <ul style="list-style-type: none"> • Admin deletion is a physical delete. In other words, this will permanently remove the Admin from the database (cannot be recovered). <p>The Instructor shall be able to cancel the use case at any time prior to submitting it.</p>		
Related Use Cases			
Assumptions:			
Open Issues:			

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Use Case 3: The Admin edits user accounts

UC ID and Name:	UC-3: Edit user accounts		
Created By:	Rahul Shrestha	Date Created:	10/03/2025
Primary Actor:	Admin	Secondary Actors:	
Trigger:	The Admin indicates to edit an user account.		
Description:	The Admin wants to edit existing user accounts in the system to ensure accuracy of user information, update roles, or manage access rights.		
Preconditions:	PRE-1. The Admin must be logged into the system with valid credentials. PRE-2. The user account to be edited must already exist in the system.		
Postconditions:	POST-1. The user account is successfully updated with new information.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to edit a user account. 2. The System displays the current details of the selected user account. 3. The Admin updates the desired fields (e.g., name, email, phone number, role, status, etc.). 4. The System validates the new details. 5. The Admin confirms and saves the changes. 6. The System updates the database with the new information. 7. The System confirms to the Admin that the user account has been updated. 8. Use case ends. 		
Extensions:	<p>5a. User account not found: 5a1. The System alerts the Admin that the account does not exist. 5a2. Admin may retry with a different search.</p> <p>8a. Invalid input detected (e.g., incorrect email format, duplicate username): 6a1. The System alerts the Instructor that no classrooms match the search criteria. 6a2. The Instructor can try again with different input.</p> <p>10a. Database error occurs: 10a1. The System displays an error message. 10a2. Changes are not saved.</p>		
Priority:	High		
Frequency of Use:	As needed; could range from occasional corrections to frequent updates depending on system use.		
Business Rules:			
Associated Information:	<p>Details:</p> <ul style="list-style-type: none"> ● Admin ID ● User ID ● Editable fields (Name, Email, Role, Status, etc.) ● Timestamp of changes 		
Related Use Cases	UC-NUMBER: Admin views user accounts		
Assumptions:			
Open Issues:			

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Use Case 4: The Admin invites instructors to register an account

UC ID and Name:	UC-4: Invite instructors to register an account		
Created By:	Long Dau	Date Created:	09/26/2025
Primary Actor:	Admin	Secondary Actors:	Instructor
Trigger:	The Admin indicates to invite instructors to register an account.		
Description:	The Admin wants to invite instructors to register an account in the System, so that they can create a classroom for their students.		
Preconditions:	PRE-1. The Admin is logged into the System.		
Postconditions:	POST-1. Invitation emails are sent to instructors.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to invite instructors to register an account. 2. The System asks the Admin to provide instructors' emails. See the Associated Information section for format. 3. The Admin provides instructor emails and confirms that she has finished. 4. The System validates the Admin's inputs according to the emails format defined in the Associated Information of this use case. 5. The System displays the number of emails. 6. The System displays the email message. See the Associated Information section for the default message. 7. The Admin either confirms to send the invitation (continues the normal flow) or chooses to modify the details (return to step 3). 8. The System sends out an email to each email address. 9. Use case ends. 		
Extensions:	<p>4a. Input validation rule violation:</p> <p>4a1. The System alerts the Admin that an input validation rule is violated and displays the nature and location of the error.</p> <p>4a2. The Admin corrects the mistake and returns to step 4 of the normal flow.</p> <p>6a. The Admin indicates to personalize the default email message:</p> <p>6a1. The Admin customizes the email content and confirms the message.</p> <p>6a2. Returns to step 6 of the normal flow.</p>		
Priority:	High		
Frequency of Use:	2 users, 1-5 usage per year.		
Business Rules:	<p>BR-1: Users that receive invites must be sent via an '.edu' email to ensure enrollment in University.</p> <p>BR-2: Users that receive invites must accept the invite link to the classroom within 1 week before the link is invalid.</p>		
Associated Information:	<p>Email format: emails shall be separated by semicolon and the System shall ignore spaces in between.</p> <p>E.g.,</p> <p>Good: john.doe@tcu.edu; f.smith@tcu.edu; tim.johnson@tcu.edu; lily.p.lee@tcu.edu</p> <p>Good: john.doe@tcu.edu;f.smith@tcu.edu</p> <p>Bad: john.doe@tcu.edu; f.smith@tcu.edu;</p> <p>Bad: john.doe@tcu.edu f.smith@tcu.edu</p> <p>Default email message:</p> <p><i>Subject: Welcome to DiseaseQuest - Complete Your Registration</i></p> <p><i>Hello,</i></p>		

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	<p><i>[Name of the Admin] has invited you to join DiseaseQuest. To complete your registration, please use the link below:</i></p> <p><i>[Registration link]</i></p> <p><i>If you have any questions or need assistance, feel free to contact [Admin's email] or our team directly.</i></p> <p><i>Please note: This email is not monitored, so do not reply directly to this message.</i></p> <p><i>Best regards,</i> <i>DiseaseQuest Team</i></p> <p>The invitation link shall be unique for each instructor. x The Admin shall be able to cancel the use case at any time prior to submitting it.</p>
Related Use Cases	The instructor needs to <u>UC-NUMBER: Set up an instructor account</u> after receiving the invitation email.
Assumptions:	
Open Issues:	

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Use Case 5: Admin Delete Instructor

UC ID and Name:	UC-5: Delete instructor																																	
Created By:	Kavish Soningra	Date Created:	09/26/2025																															
Primary Actor:	Admin	Secondary Actors:	Instructor																															
Trigger:	Admin indicates to delete an Instructor account																																	
Description:	The Admin wants to delete an Instructor account, so that outdated, duplicate, or unauthorized accounts can be removed and the system maintains data accuracy and security.																																	
Preconditions:	PRE-1. Admin is logged in, instructor exists.																																	
Postconditions:	POST-1. Instructor account is removed.																																	
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to delete an Instructor. 2. The Admin views the details of this Instructor through UC-7: View an Instructor. 3. The Admin chooses to delete this Instructor. 4. The System alerts the Admin of the consequences of this deletion according to the “Data integrity and deletion rules” defined in the Associated Information of this use case, warns the Admin about the deletion, and asks the Admin to confirm. 5. The Admin confirms the deletion. 6. The System deletes the Instructor according to the “Deletion strategy” defined in the Associated Information of this use case and alerts the Admin that this Instructor has been deleted. 7. Use case ends. 																																	
Extensions:	Instructor not found, admin cancels.																																	
Priority:	Medium																																	
Frequency of Use:	Rare																																	
Business Rules:																																		
Associated Information:	<p>Details:</p> <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Instructor ID</td> <td>Integer</td> <td>no</td> <td>Required for audit trail</td> <td>Instructor</td> </tr> <tr> <td>Name</td> <td>String</td> <td>no</td> <td>PII—view only</td> <td>Instructor</td> </tr> <tr> <td>Email</td> <td>String</td> <td>no</td> <td>Protected PII, removed on deletion</td> <td>Email</td> </tr> <tr> <td>Deletion Type</td> <td>Enum</td> <td>no</td> <td>Must follow business rules</td> <td>Deletion</td> </tr> <tr> <td>Timestamp</td> <td>DateTime</td> <td>no</td> <td>Immutable record</td> <td>Audit</td> </tr> </tbody> </table> <p>Data integrity and deletion rules:</p> <ul style="list-style-type: none"> • If an Instructor already has an associated classroom, deleting an Instructor will automatically remove students from the classroom and delete the classroom. <p>Deletion strategy:</p> <ul style="list-style-type: none"> • Instructor deletion is a physical delete. In other words, this will permanently remove the Instructor from the database (cannot be recovered). 				Property name	Data type	Editability	Security/access concerns	Reference to glossary	Instructor ID	Integer	no	Required for audit trail	Instructor	Name	String	no	PII—view only	Instructor	Email	String	no	Protected PII, removed on deletion	Email	Deletion Type	Enum	no	Must follow business rules	Deletion	Timestamp	DateTime	no	Immutable record	Audit
Property name	Data type	Editability	Security/access concerns	Reference to glossary																														
Instructor ID	Integer	no	Required for audit trail	Instructor																														
Name	String	no	PII—view only	Instructor																														
Email	String	no	Protected PII, removed on deletion	Email																														
Deletion Type	Enum	no	Must follow business rules	Deletion																														
Timestamp	DateTime	no	Immutable record	Audit																														

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	The Admin shall be able to cancel the use case at any time prior to submitting it.
Related Use Cases:	UC-NUMBER:View an Instructor
Assumptions:	
Open Issues:	

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Use Case 6: Admin Find an instructor

UC ID and Name:	UC-6: Find an instructor		
Created By:	Long Dau	Date Created:	10/03/2025
Primary Actor:	Admin	Secondary Actors:	System
Trigger:	The Admin indicates to search for an instructor in the System.		
Description:	The Admin wants to locate an instructor's account in the System, so that they can view or manage the instructor's details.		
Preconditions:	PRE-1. The Admin is logged into the System. PRE-2. At least one instructor exists in the System.		
Postconditions:	POST-1. The System displays the instructor(s) that match the search criteria.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to search for an instructor. 2. The Admin enters search criteria (e.g., name, email, school). 3. The System validates the search input. 4. The System searches the database for matching instructor accounts. 5. The System displays a list of results. 6. The Admin selects the desired instructor to view details. 7. Use case ends. 		
Extensions:	2a. Invalid input 2a1. The System alerts the Admin to correct it. 3a. No matches found: 3a1. The System notifies the Admin that no instructor meets the search criteria.		
Priority:	Medium		
Frequency of Use:	Occasional; used when the Admin needs to locate a specific instructor.		
Business Rules:	Search criteria may include name, email, or school. Results are limited to instructors with active accounts.		
Associated Information:	Instructor details: name, email, school, account status.		
Related Use Cases:	UC-NUMBER: View an instructor		
Assumptions:			
Open Issues:			

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Use Case 7: The Admin views an instructor

UC ID and Name:	UC-7: View an instructor		
Created By:	Rahul Shrestha	Date Created:	10/03/2025
Primary Actor:	Admin	Secondary Actors:	
Trigger:	The Admin selects the “View Instructor” option from the Admin Dashboard.		
Description:	The Admin wants to view the profile and details of a specific instructor to verify their information, check classrooms, or monitor activity.		
Preconditions:	PRE-1. The Admin must be logged into the system with valid credentials. PRE-2. The instructor must exist in the system database.		
Postconditions:	POST-1. The Admin successfully views the details of the selected instructor.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin logs into the system. 2. The Admin navigates to the Admin Dashboard. 3. The Admin selects the “Instructor Management” option. 4. The System displays a list of all instructors. 5. The Admin searches for or selects the instructor to view. 6. The System retrieves and displays the instructor’s profile, including: Instructor ID, Name, Email, Assigned Classrooms, Status, etc. 7. The Admin reviews the details. 8. Use case ends. 		
Extensions:	<p>5a. Instructor not found: 5a1. The System alerts the Admin that the instructor does not exist. 5a2. Admin may retry with different input.</p> <p>6a. Data retrieval error: 6a1. The System displays an error message and does not show details. 6a2. Admin may retry later.</p>		
Priority:	Medium		
Frequency of Use:	Occasionally, as needed when monitoring instructors or verifying records.		
Business Rules:			
Associated Information:	Details: <ul style="list-style-type: none"> ● Admin ID ● Instructor ID ● Instructor Profile (Name, Email, Role, Assigned Classroom, Status, etc.) ● Timestamp of access 		
Related Use Cases	UC-NUMBER: Admin edits instructors UC-NUMBER: Admin delete instructors		
Assumptions:			
Open Issues:			

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Use Case 8: The Admin creates a case

UC ID and Name:	UC-8: Create a case		
Created By:	Chris Musselman	Date Created:	10/01/25
Primary Actor:	Admin	Secondary Actors:	
Trigger:	The Admin indicates to create a new case.		
Description:	The Admin wants to create a new case, so that the students can play it		
Preconditions:	PRE-1. The Admin is logged into the System.		
Postconditions:	POST-1. The new case is stored in the System.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to create a new case. 2. The System asks the Admin to upload the files containing the data of the new case. 3. The Admin uploads the files and confirms that she has finished. 4. The System validates the Admin's inputs by file type. 5. The System displays the details of the new case and asks the Admin to confirm the creation. 6. The Admin either confirms the creation (continues the normal flow) or chooses to modify the details (return to step 3). 7. The System saves the new case and informs the Admin that this case has been created. 8. Use case ends. 		
Extensions:	4a. Input validation rule violation: 4a1. The System alerts the Admin that an input validation rule is violated and displays the nature and location of the error. 4a2. The Admin corrects the mistake and returns to step 4 of the normal flow.		
Priority:	High		
Frequency of Use:	1 user, 1 usage per year.		
Business Rules:	BR-3: All patient cases uploaded by admins must work to ensure that all FERPA/HIPAA guidelines are followed.		
Associated Information:	The Admin shall be able to cancel the use case at any time prior to submitting it.		
Related Use Cases			
Assumptions:			
Open Issues:			

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Use Case 9: The Admin/Instructor views students list

UC ID and Name:	UC-9: View a student																																											
Created By:	Carlota Castelltort Pinto	Date Created:	09/27/2025																																									
Primary Actor:	Admin, Instructor	Secondary Actors:																																										
Trigger:	The User indicates to view the list of students.																																											
Description:	The User wants to view the list of students, so that she can get a better idea of the students in the classroom.																																											
Preconditions:	PRE-1. The User is logged into the System.																																											
Postconditions:	POST-1. The details of the list of students are displayed to the User.																																											
Main Success Scenario:	<ol style="list-style-type: none"> 1. The User indicates to view the total list of students. 2. The System retrieves and displays the details of the list of students according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 3. The User views the list of students. 4. Use case ends. 																																											
Extensions:																																												
Priority:	High																																											
Frequency of Use:	2 users, average of 10 usages per week.																																											
Business Rules:																																												
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Full name</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Email</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>MS Year Number</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>School</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Classroom</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Status</td> <td>[Registered, Unregistered]</td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Full name	String				Email	String				MS Year Number	Integer				School	String				Classroom	Integer				Status	[Registered, Unregistered]			
Details:																																												
Property name	Data type	Editability	Security/access concerns	Reference to glossary																																								
Full name	String																																											
Email	String																																											
MS Year Number	Integer																																											
School	String																																											
Classroom	Integer																																											
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Related Use Cases:																																												
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Use Case 10: The Admin deletes a student

UC ID and Name:	UC-10: Delete a student		
Created By:	Chris Musselman	Date Created:	09/26/2025
Primary Actor:	Admin	Secondary Actors:	Student
Trigger:	The Admin indicates to delete a Student.		
Description:	The Admin wants to delete a Student, because a Student may not be enrolled in the class or school anymore.		
Preconditions:	PRE-1. The Admin is logged into the System. PRE-2. There exists at least one Student in the System.		
Postconditions:	POST-1. The Student is deleted from the System according to the “Deletion strategy” defined in the Associated Information of this use case.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to delete a Student . 2. The Admin views the details of this Student through <u>UC-NUMBER: View a student</u>. 3. The Admin chooses to delete this Student. 4. The System alerts the Admin of the consequences of this deletion according to the “Data integrity and deletion rules” defined in the Associated Information of this use case, warns the Admin about the deletion, and asks the Admin to confirm. 5. The Admin confirms the deletion. 6. The System deletes the Student according to the “Deletion strategy” defined in the Associated Information of this use case and alerts the Admin that this Student has been deleted. 7. Use case ends. 		
Extensions:			
Priority:	Low		
Frequency of Use:	Rare. 1 user, 1 usage per year.		
Business Rules:			
Associated Information:	<p>Data integrity and deletion rules:</p> <ul style="list-style-type: none"> ● If a Student has results, data, and statistics associated with their game time, deleting a Student will automatically delete the associated information. <p>Deletion strategy:</p> <ul style="list-style-type: none"> ● Student deletion is a physical delete. In other words, this will permanently remove the Student and the associated evaluations from the database (cannot be recovered). <p>The Admin shall be able to cancel the use case at any time prior to submitting it.</p>		
Related Use Cases:			
Assumptions:			
Open Issues:			

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Use Case 11: The Admin/Instructor views classrooms list

UC ID and Name:	UC-11: View a classroom																																																					
Created By:	Carlota Castellort Pinto	Date Created:	10/01/2025																																																			
Primary Actor:	Admin, Instructor	Secondary Actors:																																																				
Trigger:	The User indicates to view the list of classrooms																																																					
Description:	The User wants to view the list of classrooms, so that she can get a better idea of all the classrooms that exist.																																																					
Preconditions:	PRE-1. The User is logged into the System.																																																					
Postconditions:	POST-1. The list of classrooms are displayed to the User .																																																					
Main Success Scenario:	<ol style="list-style-type: none"> 1. The User indicates to view the list of classrooms. 2. The System retrieves and displays the details of this classroom according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 3. The User views the list of classrooms. 4. Use case ends. 																																																					
Extensions:																																																						
Priority:	High																																																					
Frequency of Use:	1-5 users, average of 5 usages per week.																																																					
Business Rules:																																																						
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Classroom Name</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Classroom Code</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Instructor (ADMIN ONLY VIEW)</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>School (ADMIN ONLY VIEW)</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Section</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>startDate</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>endDate</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Status</td> <td>[Active, Deactivated]</td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Classroom Name	String				Classroom Code	Integer				Instructor (ADMIN ONLY VIEW)	String				School (ADMIN ONLY VIEW)	String				Section	Integer				startDate	String				endDate	String				Status	[Active, Deactivated]			
Details:																																																						
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Classroom Name	String																																																					
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Status	[Active, Deactivated]																																																					
Related Use Cases:																																																						
Assumptions:																																																						
Open Issues:																																																						

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Use Case 12: The Admin deletes a classroom

UC ID and Name:	UC-12: Delete a senior design team		
Created By:	Dylan Noall	Date Created:	10/03/2025
Primary Actor:	Admin	Secondary Actors:	Student, Instructor
Trigger:	The Admin indicates to delete an existing classroom.		
Description:	The Admin wants to delete an existing classroom.		
Preconditions:	PRE-1. The Admin is logged into the System. PRE-2. There exists at least one classroom.		
Postconditions:	POST-1. The classroom is deleted from the System according to the “Deletion strategy” defined in the Associated Information of this use case.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to delete an existing classroom. 2. The Admin views the details of this classroom through <u>UC-NUMBER: View a classroom</u>. 3. The Admin chooses to delete this classroom. 4. The System alerts the Admin of the consequences of this deletion according to the “Data integrity and deletion rules” defined in the Associated Information of this use case, warns the Admin about the deletion, and asks the Admin to confirm. 5. The Admin confirms the deletion. 6. The System deletes the classroom according to the “Deletion strategy” defined in the Associated Information of this use case and alerts the Admin that this classroom has been deleted. 7. The System notifies relevant actors about the deletion of the classroom according to the “Notification” defined in the Associated Information of this use case. 8. Use case ends. 		
Extensions:			
Priority:	Low		
Frequency of Use:	Rare. 1 user, 1 usage per year.		
Business Rules:			
Associated Information:	<p>Data integrity and deletion rules:</p> <ul style="list-style-type: none"> • If a classroom already has students or instructors in it, deleting a class will automatically remove students and instructors from this class first. <p>Deletion strategy:</p> <ul style="list-style-type: none"> • Classroom deletion is a physical delete. In other words, this will permanently remove the classroom from the database (cannot be recovered). <p>Notification:</p> <ul style="list-style-type: none"> • Students and instructors of the deleted class shall be notified. <p>The Admin shall be able to cancel the use case at any time prior to submitting it.</p>		
Related Use Cases:	UC-NUMBER: View a classroom		
Assumptions:			
Open Issues:			

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Use Case 13: The Instructor sets up an instructor account

UC ID and Name:	UC-13: Set up an instructor account		
Created By:	Dylan Noall	Date Created:	09/26/2025
Primary Actor:	Instructor	Secondary Actors:	
Trigger:	The Instructor clicks the registration link in the invitation email.		
Description:	The Instructor wants to set up an account, so that she can create a class module for students to play the game.		
Preconditions:	PRE-1. An invitation email is sent to the Instructor.		
Postconditions:	POST-1. The Instructor account is set up.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor clicks the registration link in the invitation email. 2. The System opens a new page and asks the Instructor to enter the details of this new account according to the “Details” defined in the Associated Information of this use case. 3. The Instructor enters the details of this new account and confirms that she has finished. 4. The System validates the Instructor’s inputs according to the “Details” defined in the Associated Information of this use case. 5. The System displays the details of the new account and asks the Instructor to confirm the registration. 6. The Instructor either confirms the registration (continues the normal flow) or chooses to modify the details (return to step 3). 7. The System saves the information about the new account and informs the Instructor that this account has been created. 8. The System redirects the Instructor to the login page. 9. Use case ends. 		
Extensions:	<p>2a. The Instructor has already set up the account:</p> <p>2a1. The System alerts the Instructor that she has already set up her account and shall log in.</p> <p>2a2. The System redirects the Instructor to the login page.</p> <p>2a3. Use case ends.</p> <p>4a. Input validation rule violation:</p> <p>4a1. The System alerts the Instructor that an input validation rule is violated and displays the nature and location of the error.</p> <p>4a2. The Instructor corrects the mistake and returns to step 4 of the normal flow.</p>		
Priority:	High		
Frequency of Use:	Approximately 2-10 users, average of 1 usage per year.		
Business Rules:			
Associated Information:	<p>Details:</p> <ul style="list-style-type: none"> ● Title ● First name ● Last name ● School ● Email ● Password ● Reenter password: must be the same as password. <p>The Instructor shall be able to cancel the use case at any time prior to submitting it.</p>		
Related Use Cases			
Assumptions:			
Open Issues:			

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Use Case 14: The Instructor edits their Instructor account

UC ID and Name:	UC-14: Edit an Instructor account																																																						
Created By:	Dylan Noall	Date Created:	09/29/2025																																																				
Primary Actor:	Instructor	Secondary Actors:																																																					
Trigger:	The Instructor indicates to edit their account																																																						
Description:	The Instructor wants to edit the details associated with their account																																																						
Preconditions:	PRE-1. The Instructor is logged into the system.																																																						
Postconditions:	POST-1. The Instructor account is updated with the new information.																																																						
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to change the details of her account. 2. The System displays the details of her account. 3. The Instructor chooses to change the details of this account. 4. The System asks the Instructor to make changes to this account where allowed according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 5. The Instructor makes changes to this account until she confirms that she has finished changing. 6. The System validates the Instructor’s changes according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 7. The System displays the updated details of this account and alerts the Instructor to confirm the change. 8. The Instructor either confirms the change (continues the normal flow) or chooses to continue to change the details (return to step 5). 9. The System saves the changes, carries out the effect of change according to the “Details” defined in the Associated Information of this use case, and informs the Instructor that this account has been changed. 10. Use case ends 																																																						
Extensions:	6a. Input validation rule violation: 6a1. The System alerts the Instructor that an input validation rule is violated and displays the nature and location of the error. 6a2. The Instructor corrects the mistake and returns to step 6 of the normal flow.																																																						
Priority:	High																																																						
Frequency of Use:	Rare. Approximately 2-10 users, average of 1 usage per year.																																																						
Business Rules:																																																							
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Warning</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Title</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>First name</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Last name</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Email</td> <td>String</td> <td>No</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Password</td> <td>String</td> <td>No</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>School</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>The Instructor shall be able to cancel the use case at any time prior to submitting it.</p>						Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary	Title	String	Yes					First name	String	Yes					Last name	String	Yes					Email	String	No					Password	String	No					School	String	Yes				
Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary																																																	
Title	String	Yes																																																					
First name	String	Yes																																																					
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Email	String	No																																																					
Password	String	No																																																					
School	String	Yes																																																					
Related Use Cases																																																							
Assumptions:																																																							
Open Issues:																																																							

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Use Case 15: The Instructor invites students to join DiseaseQuest

UC ID and Name:	UC-15: Invite students to join a classroom module		
Created By:	Chris Musselman	Date Created:	10/01/25
Primary Actor:	Instructor	Secondary Actors:	Student
Trigger:	The Instructor indicates to invite students to join DiseaseQuest.		
Description:	The Instructor wants to send invitation emails to students, so that they can join DiseaseQuest.		
Preconditions:	PRE-1. The Instructor is logged into the System.		
Postconditions:	POST-1. Invitation emails are sent to all the students.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to invite students to join DiseaseQuest. 2. The System asks the Instructor to provide students' emails. 3. The Instructor provides student emails and confirms that she has finished. 4. The System validates the Instructor's inputs according to the emails format defined in the Associated Information of this use case. 5. The System displays the number of emails. 6. The System displays the email message. See the Associated Information section for the default message. 7. The Instructor either confirms to send the invitation (continues the normal flow) or chooses to modify the details (return to step 3). 8. The System sends out an email to each email address. 9. Use case ends. 		
Extensions:	<p>4a. Input validation rule violation:</p> <p>4a1. The System alerts the Instructor that an input validation rule is violated and displays the nature and location of the error.</p> <p>4a2. The Instructor corrects the mistake and returns to step 4 of the normal flow.</p> <p>6a. The Instructor indicates to personalize the default email message:</p> <p>6a1. The Instructor customizes the email content and confirms the message.</p> <p>6a2. Returns to step 6 of the normal flow.</p>		
Priority:	High		
Frequency of Use:	3-5 users, 1 usage per year.		
Business Rules:	<p>BR-1: Users that receive invites must be sent via an '.edu' email to ensure enrollment in University.</p> <p>BR-2: Users that receive invites must accept the invite link to the classroom within 1 week before the link is invalid.</p>		
Associated Information:	<p>Email format: emails shall be separated by semicolon and the System shall ignore spaces in between.</p> <p>E.g.,</p> <p>Good: john.doe@tcu.edu; f.smith@tcu.edu; tim.johnson@tcu.edu; lily.p.lee@tcu.edu</p> <p>Good: john.doe@tcu.edu;f.smith@tcu.edu</p> <p>Bad: john.doe@tcu.edu; f.smith@tcu.edu;</p> <p>Bad: john.doe@tcu.edu f.smith@tcu.edu</p> <p>Default email message:</p> <p><i>Subject: Welcome to DiseaseQuest- Complete Your Registration</i></p> <p><i>Hello,</i></p>		

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	<p><i>[Name of the Instructor] has invited you to join DiseaseQuest. To complete your registration, please use the link below:</i></p> <p><i>[Registration link]</i></p> <p><i>If you have any questions or need assistance, feel free to contact [Instructor's email] or our team directly.</i></p> <p><i>Please note: This email is not monitored, so do not reply directly to this message.</i></p> <p><i>Best regards,</i> <i>DiseaseQuest Team</i></p> <p>The invitation link shall be unique for each student.</p> <p>The Instructor shall be able to cancel the use case at any time prior to submitting it.</p>
Related Use Cases	The student needs to <u>UC-NUMBER: Set up a student account</u> after receiving the invitation email.
Assumptions:	
Open Issues:	

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Use Case 16: Instructor creates a classroom

UC ID and Name:	UC-16: Create a classroom		
Created By:	Long Dau	Date Created:	10/03/2025
Primary Actor:	Instructor	Secondary Actors:	System
Trigger:	The Instructor indicates the intention to create a new classroom		
Description:	The Instructor wants to create a classroom so that enrolled Students can be organized into a cohort, receive an invite code/link, and access assigned simulations/cases.		
Preconditions:	PRE-1. The Instructor is logged into the System. PRE-2. The Instructor has a valid, active instructor account.		
Postconditions:	POST-1. A new Classroom record is created with the provided details. POST-2. A unique invite code and/or invite link is generated for the Classroom. POST-3. The Instructor is the owner of the new Classroom and can manage it.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to create a new classroom. 2. The System displays the “Create classroom” form with fields defined in Associated Information → Details. 3. The Instructor completes the form and submits it. 4. The System validates the inputs per Associated Information → Details and Business Rules. 5. The System displays a summary of the classroom details and requests confirmation. 6. The Instructor confirms creation (or returns to Step 2 to edit). 7. The System creates the classroom, assigns the Instructor as owner, generates an invite code/link, and stores all information. 8. The System displays a success message with the classroom overview and the invite code/link. 9. Use case ends. 		
Extensions:	4a. Invalid inputs: 4a1. The System highlights the error. The Instructor corrects and resubmits. 5a. Instructor cancels: 5a1. The System discards changes and returns to the dashboard.		
Priority:	High		
Frequency of Use:	Occasional. Approximately 2–10 Instructors; each creates ~1–4 classrooms per academic term.		
Business Rules:	BR-6: Each classroom must have at least 1 instructor. BR-4: Classrooms that Instructors create will expire 1 week before the start of the next semester to remove students from the classroom BR-5: Classrooms that have expired can be brought back by the same professor with a set of no included students, and invite links must be resent to the students for the given semester.		
Associated Information:	Classroom details: course title, course code, section, term, start and end dates. Invite code/link for student enrollment.		
Related Use Cases:	Instructor invites student to create account Edit classroom details Instructor views classroom roster View one classroom Find a classroom Instructor views class statistics		
Assumptions:			
Open Issues:			

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Use Case 17: Instructor Views Classroom Roster

UC ID and Name:	UC-17: View classroom roster			
Created By:	Kavish Soningra	Date Created:	10/03/2025	
Primary Actor:	Instructor	Secondary Actors:	System	
Trigger:	The Instructor indicates to view the classroom roster.			
Description:	The Instructor wants to view the list of students enrolled in a classroom, so that they can confirm attendance, manage participation, and monitor enrollment status.			
Preconditions:	PRE-1 Instructor is logged in PRE-1 Class exists.			
Postconditions:	POST-1 The system displays a list of students in that class.			
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to view the classroom roster. 2. The system retrieves the student list. 3. The instructor views the names, emails, and year of each student. 4. Use case ends. 			
Extensions:	No students enrolled, class not found.			
Priority:	High			
Frequency of Use:	Weekly (instructors check rosters often).			
Business Rules:				
Associated Information:	Details:			
	Property name	Data type	Editability	Security/access concerns
	Student list	Array of String	no	Visible to assigned instructor only
	Classroom name	String	no	Visible to assigned instructor only
	Student year	Integer	no	View only
	Student email	String	no	Protected, not editable
Reference to glossary	Student	classroom	MS year	student
Related Use Cases:				
Assumptions:				
Open Issues:				

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Use Case 18: Instructor finds Students

UC ID and Name:	UC-18: Find Students																												
Created By:	Alex Canales	Date Created:	08/01/25																										
Primary Actor:	Instructor	Secondary Actors:																											
Trigger:	The Instructor indicates to find Students.																												
Description:	The Instructor wants to find Students which match specific criteria, so that she can decide what to do next.																												
Preconditions:	PRE-1. The Instructor is logged into the System.																												
Postconditions:	POST-1. A list of matching Students is returned and displayed to the Spirit Director. It is possible that the list is empty.																												
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to find Students. 2. The System asks the Instructor to enter search values according to the “Search criteria” defined in the Associated Information of this use case. 3. The Instructor enters one or more search values and confirms that they have finished entering. 4. The System finds all Students that match the provided search criteria values. 5. The System displays the matching Students according to the “Search results display strategy” and the “Sort criteria” defined in the Associated Information of this use case. 6. Use case ends. 																												
Extensions:	<p>4a. No matching students are found:</p> <p>4a1. The System alerts the Instructor that no matching Students are found.</p> <p>4a2. The Instructor terminates the use case or chooses to return to step 2 of the normal flow.</p> <p>5a. The Instructor chooses to select a different set of properties to display the matching Students:</p> <p>5a1. The System displays the current “Search results display strategy.”</p> <p>5a2. The Instructor enters a customized “Search results display strategy,” confirms that they have finished entering, and returns to step 5 of the normal flow.</p> <p>5b. The Instructor chooses to resort the search results:</p> <p>5b1. The Instructor resorts the search result according to the “Sort criteria” defined in the Associated Information of this use case and returns to step 5 of the normal flow.</p>																												
Priority:	Low																												
Frequency of Use:	Approximately 1 user, average of 2 usages per month.																												
Business Rules:																													
Associated Information:	<p>Search criteria (aka search fields, search attributes/properties, search details, searchable qualities):</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Search property name</th> <th style="text-align: left;">Data type</th> <th style="text-align: left;">Options</th> <th style="text-align: left;">Validation rule</th> <th style="text-align: left;">Security/access concerns</th> <th style="text-align: left;">Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>First name</td> <td>String</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Last name</td> <td>String</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Email</td> <td>String</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Search results display strategy (specify which properties to display for each matching Student):</p> <ul style="list-style-type: none"> ● First name ● Last name ● email ● ms year ● classroom ● school 					Search property name	Data type	Options	Validation rule	Security/access concerns	Reference to glossary	First name	String					Last name	String					Email	String				
Search property name	Data type	Options	Validation rule	Security/access concerns	Reference to glossary																								
First name	String																												
Last name	String																												
Email	String																												

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	Sort criteria: <ul style="list-style-type: none"> • Last name (default) • First name
Related Use Cases:	
Assumptions:	
Open Issues:	

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Use Case 19: The Instructor removes a student from a classroom

UC ID and Name:	UC-19: Remove a student from a classroom		
Created By:	Carlota Castelltort Pinto	Date Created:	09/27/2025
Primary Actor:	Instructor	Secondary Actors:	Student
Trigger:	The Instructor indicates to remove a Student from a classroom.		
Description:	The Instructor wants to remove a Student from their classroom, because a Student may not be enrolled in the class anymore.		
Preconditions:	PRE-1. Classroom is created. PRE-2. Students have set up their accounts. PRE-3. The Instructor is logged into the System. PRE-4. Students have been assigned to a classroom.		
Postconditions:	POST-1. The Student is removed from a classroom.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to remove a Student from a classroom 2. The Instructor views the details of the classroom through <u>UC-20: The Instructor finds a classroom</u>. 3. The Instructor removes a Student from this classroom. 4. The System displays the new classroom members and asks the Instructor to confirm the removal. 5. The Instructor confirms the removal. 6. The System notifies relevant actors about the assignment according to the "Notification" defined in the Associated Information of this use case. 7. Use case ends. 		
Extensions:	5a. The Instructor finds a wrong student removal: 5a1. The Instructor corrects the wrong removal and returns to step 4 of the normal flow.		
Priority:	Low		
Frequency of Use:	Rare. 1 user, 1 usage per year.		
Business Rules:			
Associated Information:	Notification: <ul style="list-style-type: none"> • The System notifies the Student about her classroom removal. The Instructor shall be able to cancel the process at any time prior to submitting it.		
Related Use Cases:			
Assumptions:			
Open Issues:			

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Use Case 20: The Instructor finds a classroom

UC ID and Name:	UC-20: The Instructor finds a classroom		
Created By:	Rahul Shrestha	Date Created:	10/03/2025
Primary Actor:	Instructor	Secondary Actors:	
Trigger:	The Instructor indicates to find a classroom.		
Description:	The Instructor wants to search and locate a specific classroom so that they can manage or interact with it (e.g., add students, upload materials, view progress).		
Preconditions:	PRE-1. The Instructor must have a valid account and be logged in. PRE-2. At least one classroom must exist in the system.		
Postconditions:	POST-1. The Instructor successfully locates the desired classroom.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to find a classroom. 2. The System displays a search field and available filtering options (e.g., by class name, ID or subject). 3. The Instructor enters search criteria (e.g., “class-name” or Classroom ID). 4. The System validates the input and queries the database. 5. The System displays a list of classrooms matching the criteria. 6. The Instructor selects the desired classroom from the results. 7. The System displays classroom details (classroom ID, name, subject, enrolled students, etc.). 8. Use case ends. 		
Extensions:	<p>4a. Invalid search input:</p> <p>4a1. The System alerts the Instructor that the input format is invalid. 4a2. The Instructor is prompted to re-enter valid input.</p> <p>6a. No results found:</p> <p>6a1. The System alerts the Instructor that no classrooms match the search criteria. 6a2. The Instructor can try again with different input.</p>		
Priority:	High		
Frequency of Use:	Frequently, whenever Instructors need to locate classrooms.		
Business Rules:			
Associated Information:	<p>Details:</p> <ul style="list-style-type: none"> ● Instructor ID ● Classroom ID ● MS Year Number ● Class Name ● Subject ● List of enrolled students 		
Related Use Cases	UC-NUMBER: Instructor views a classroom		
Assumptions:			
Open Issues:			

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Use Case 21: The Instructor edits a DiseaseQuest classroom

UC ID and Name:	UC-21: Edit a DiseaseQuest classroom																										
Created By:	Chris Musselman	Date Created:	10/01/25																								
Primary Actor:	Instructor	Secondary Actors:																									
Trigger:	The Instructor indicates to change the details of an existing DiseaseQuest classroom.																										
Description:	The Instructor wants to change the details of an existing DiseaseQuest classroom, so that the section information is correct and up-to-date.																										
Preconditions:	PRE-1. The Instructor is logged into the System.																										
Postconditions:	POST-1. Changes made to the DiseaseQuest classroom are stored in the System.																										
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to change the details of an existing DiseaseQuest classroom.. 2. The Instructor views the details of this DiseaseQuest classroom through <u>UC-NUMBER: View a DiseaseQuest classroom</u>. 3. The Instructor chooses to change the details of this DiseaseQuest classroom.. 4. The System asks the Instructor to make changes to this DiseaseQuest classroom where allowed according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 5. The Instructor makes changes to this senior design section until she confirms that she has finished changing. 6. The System validates the Instructor changes and alerts warning messages according to the “Details” defined in the Associated Information of this use case. 7. The Instructor acknowledges the warnings and chooses to continue. 8. The System displays the updated details of this senior design section and alerts the Instructor to confirm the change. 9. The Instructor either confirms the change (continues the normal flow) or chooses to continue to change the details (return to step 5). 10. The System saves the changes, carries out the effect of change according to the “Details” defined in the Associated Information of this use case, and informs the Instructor that this senior design section has been changed. 11. Use case ends. 																										
Extensions:	6a. Input validation rule violation: 6a1. The System alerts the Instructor that an input validation rule is violated and displays the nature and location of the error. 6a2. The Instructor corrects the mistake and returns to step 6 of the normal flow.																										
Priority:	High																										
Frequency of Use:	3-5 users, average of 1 usage per year.																										
Business Rules:																											
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Warning</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Class name</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Class Description</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary	Class name	String	Yes					Class Description	String	Yes				
Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary																					
Class name	String	Yes																									
Class Description	String	Yes																									
	The Instructor shall be able to cancel the use case at any time prior to submitting it.																										
Related Use Cases:																											
Assumptions:																											
Open Issues:																											

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 22: Instructor Views Class Statistics

UC ID and Name:	UC-22: View a Student Statistics																																														
Created By:	Alex Canales	Date Created:	10/01/25																																												
Primary Actor:	Instructor	Secondary Actors:																																													
Trigger:	The Instructor indicates to view the details of a Student statistics.																																														
Description:	The Instructor wants to view the details of a Student statistics, so that the instructor can get a better idea of this Student’s progression in development of clinical reasoning with the simulation.																																														
Preconditions:	PRE-1. The Instructor is logged into the System.																																														
Postconditions:	POST-1. The statistics of the specified Student are displayed to the Instructor.																																														
Main Success Scenario:	<ol style="list-style-type: none"> 1. TheInstructor indicates to view the details of a Student statistics. 2. The Spirit Director finds a list of Student accounts through UC-17:Instructor Views a Class Roster. 3. The Instructor views the list and chooses to view the dashboard for one specific Student. 4. The System retrieves and displays details of this Student account statistics according to the “Details” defined in the Associated Information. 5. The Instructor views the statistics of this Student. 6. Use case ends. 																																														
Extensions:	3a. View Individual Simulation 3a1. Sees category score for an individual simulation 3b. View Cumulative Growth 3b1. Sees average score for each category 3b2. Sees growth metric for each category over time																																														
Priority:	High																																														
Frequency of Use:	Approximately 1 user, average of 8 usages per month.																																														
Business Rules:	BR-8: All personal data (student identity, performance metrics, simulations logs) must remain confidential and only be used only for academic evaluation within DiseaseQuest.																																														
Associated Information:	Details: <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>First name</td> <td>String</td> <td></td> <td></td> </tr> <tr> <td>Last name</td> <td>String</td> <td></td> <td></td> </tr> <tr> <td>Email</td> <td>String</td> <td></td> <td></td> </tr> <tr> <td>History Taking and Synthesis Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Physical Exam Interpretation Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Differential Diagnosis Formulation Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Diagnostic Test Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Management Reasoning Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Communication and Empathy Points</td> <td>Number</td> <td></td> <td></td> </tr> <tr> <td>Reflection and Metacognition Points</td> <td>Number</td> <td></td> <td></td> </tr> </tbody> </table>			Property name	Data type	Security/access concerns	Reference to glossary	First name	String			Last name	String			Email	String			History Taking and Synthesis Points	Number			Physical Exam Interpretation Points	Number			Differential Diagnosis Formulation Points	Number			Diagnostic Test Points	Number			Management Reasoning Points	Number			Communication and Empathy Points	Number			Reflection and Metacognition Points	Number		
Property name	Data type	Security/access concerns	Reference to glossary																																												
First name	String																																														
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Management Reasoning Points	Number																																														
Communication and Empathy Points	Number																																														
Reflection and Metacognition Points	Number																																														
Related Use Cases:	UC-17: Instructor Views a Class Roster.																																														
Assumptions:																																															
Open Issues:																																															

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 23: The Student sets up a student account

UC ID and Name:	UC-23: Set up a student account		
Created By:	Carlota Castelltort Pinto	Date Created:	09/26/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to register in the invitation email.		
Description:	The Student wants to set up an account, so that she can join a classroom to have access to play the game.		
Preconditions:	PRE-1. An invitation email is sent to the Student.		
Postconditions:	POST-1. The Student account is set up.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to register in the invitation email. 2. The System opens a new page and asks the Student to enter the details of this new account according to the “Details” defined in the Associated Information of this use case. 3. The Student enters the details of this new account and confirms that she has finished. 4. The System validates the Student’s inputs according to the “Details” defined in the Associated Information of this use case. 5. The System displays the details of the new account and asks the Student to confirm the registration. 6. The Student either confirms the registration (continues the normal flow) or chooses to modify the details (return to step 3). 7. The System saves the information about the new account and informs the Student that this account has been created. 8. The System redirects the Student to the login page. 9. Use case ends. 		
Extensions:	<p>2a. The Student has already set up the account:</p> <ol style="list-style-type: none"> 2a1. The System alerts the Student that she has already set up her account and shall log in. 2a2. The System redirects the Student to the login page. 2a3. Use case ends. <p>4a. Input validation rule violation:</p> <ol style="list-style-type: none"> 4a1. The System alerts the Student that an input validation rule is violated and displays the nature and location of the error. 4a2. The Student corrects the mistake and returns to step 4 of the normal flow. 		
Priority:	High		
Frequency of Use:	Approximately 60-240 users, 1 usage per year.		
Business Rules:			
Associated Information:	<p>Details:</p> <ul style="list-style-type: none"> ● First name ● Last name ● MS Year Number ● School ● Email ● Password ● Reenter password: must be the same as password ● <i>Nickname (automatically assigned to them when creating the account)</i> <p>The Student shall be able to cancel the use case at any time prior to submitting it.</p>		
Related Use Cases			
Assumptions:	System assigns nickname to the student		

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Open Issues:	
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Use Case 24: Student Edit Account Details

UC ID and Name:	UC-24: Edit an account																																																						
Created By:	Alex Canales	Date Created:	09/26/2025																																																				
Primary Actor:	Student	Secondary Actors:																																																					
Trigger:	The Student indicates to change the details of her account.																																																						
Description:	The Student wants to change the details of her account, so that she can correct mistakes made during registration or change the password.																																																						
Preconditions:	PRE-1. The Student is logged into the System.																																																						
Postconditions:	POST-1. Changes made to the account are stored in the System.																																																						
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to change the details of her account. 2. The System displays the details of her account. 3. The Student chooses to change the details of this account. 4. The System asks the Student to make changes to this account where allowed according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 5. The Student makes changes to this account until she confirms that she has finished changing. 6. The System validates the Student’s changes according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 7. The System displays the updated details of this account and alerts the Student to confirm the change. 8. The Student either confirms the change (continues the normal flow) or chooses to continue to change the details (return to step 5). 9. The System saves the changes, carries out the effect of change according to the “Details” defined in the Associated Information of this use case, and informs the Student that this account has been changed. 10. Use case ends. 																																																						
Extensions:	6a. Input validation rule violation: 6a1. The System alerts the Student that an input validation rule is violated and displays the nature and location of the error. 6a2. The Student corrects the mistake and returns to step 6 of the normal flow.																																																						
Priority:	High																																																						
Frequency of Use:	Rare. Approximately 35-40 users, 1 usage per year.																																																						
Business Rules:																																																							
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Warning</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>First name</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Last name</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Email</td> <td>String</td> <td>No</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Password</td> <td>String</td> <td>No</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>MS Year Number</td> <td>Integer</td> <td>No</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>School</td> <td>String</td> <td>Yes</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary	First name	String	Yes					Last name	String	Yes					Email	String	No					Password	String	No					MS Year Number	Integer	No					School	String	Yes				
Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary																																																	
First name	String	Yes																																																					
Last name	String	Yes																																																					
Email	String	No																																																					
Password	String	No																																																					
MS Year Number	Integer	No																																																					
School	String	Yes																																																					
Related Use Cases:	The Student shall be able to cancel the use case at any time prior to submitting it.																																																						
Assumptions:																																																							

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Open Issues:	
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Use Case 25: Student Edit User Account Password

UC ID and Name:	UC-25: Edit account password																												
Created By:	Kavish Soningra	Date Created:	10/01/2025																										
Primary Actor:	Student	Secondary Actors:																											
Trigger:	The student indicates to change the password.																												
Description:	The Student wants to change the password of their account, so that they can maintain security or reset credentials if the current password is outdated or compromised.																												
Preconditions:	PRE-1. The student is logged in.																												
Postconditions:	POST-1. New password is stored, old password is invalidated.																												
Main Success Scenario:	<ol style="list-style-type: none"> 1. The student indicates to change the password. 2. System prompts for old password, new password, confirm new password. 3. Student enter values. 4. System validates (old password matches, new password rules met). 5. Student confirms change. 6. System updates password and notifies success. 7. Use cases ends. 																												
Extensions:	Invalid old password, mismatch new password, weak password error.																												
Priority:	High																												
Frequency of Use:	Moderate, maybe a few times a year per user																												
Business Rules:																													
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Old Password</td> <td>String</td> <td>yes</td> <td>encrypt</td> <td>password</td> </tr> <tr> <td>New Password</td> <td>String</td> <td>yes</td> <td>encrypt</td> <td>password</td> </tr> <tr> <td>Confirm Password</td> <td>String</td> <td>yes</td> <td>encrypt</td> <td>password</td> </tr> </tbody> </table>				Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Old Password	String	yes	encrypt	password	New Password	String	yes	encrypt	password	Confirm Password	String	yes	encrypt	password
Details:																													
Property name	Data type	Editability	Security/access concerns	Reference to glossary																									
Old Password	String	yes	encrypt	password																									
New Password	String	yes	encrypt	password																									
Confirm Password	String	yes	encrypt	password																									
Related Use Cases:																													
Assumptions:																													
Open Issues:																													

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 26: The Student views introduction

UC ID and Name:	UC-26: Student views introduction		
Created By:	Rahul Shrestha	Date Created:	10/03/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to view the introduction.		
Description:	The Student wants to view the introduction content provided in the classroom in order to understand the purpose, rules, or overview before continuing further.		
Preconditions:	PRE-1. The Student must have a valid account and be logged in. PRE-2. The Student must be enrolled in the classroom.		
Postconditions:	POST-1. The Student has successfully viewed the introduction content.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to view the introduction. 2. The System retrieves the introduction content from the database. 3. The System displays the introduction to the Student. 4. The Student reads the introduction and acknowledges it (scrolls through or marks as read). 5. Use case ends. 		
Extensions:	<p>2a. The Student is not enrolled in any classroom: 2a1. The System alerts the Student that they must join a classroom to access the introduction.. 2a2. Use case ends.</p> <p>5a. Introduction content not found: 5a1. The System alerts the Student that the introduction content is not available at the moment. 5a2. Use case ends.</p>		
Priority:	High		
Frequency of Use:	Approximately 60–240 uses; at the beginning of each new session or classroom entry.		
Business Rules:	BR-7: Students can only access cases that are associated with their classes.		
Associated Information:	Details: <ul style="list-style-type: none"> ● Student ID ● Classroom ID ● Timestamp of when viewed ● Introduction content (text, images, video, or a combination) 		
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 27: Student Request a Patient to Begin a Simulation

UC ID and Name:	UC-27: User Request a Patient to Begin a Simulation		
Created By:	Alex Canales	Date Created:	10/03/25
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to request a patient to begin a simulation.		
Description:	The Student wants to request a patient for a simulation, so that a patient can be used to begin the gamified simulation		
Preconditions:			
Postconditions:	POST-1. The new request is stored in the System with a status of "Building."		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to request a patient appearance for a simulation. 2. The System displays available simulation patients. 3. The Student views and selects the desired patient. 4. The System validates the Student's request, and prepares a new storyline for the mock patient. 5. The System displays the details of the new patient generation to begin the introduction to set the stage. 6. The System saves the new patient, marks it as "Building," and informs the Student that this request has been created. 7. Use case ends. 		
Extensions:			
Priority:	High		
Frequency of Use:	Approximately all users, average of 2 usages per week.		
Business Rules:	Security/access concerns.		
Associated Information:	The Student shall be able to cancel the use case at any time prior to submitting it.		
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 28: Student views evaluation page

UC ID and Name:	UC-28: Student views evaluation page		
Created By:	Long Dau	Date Created:	10/23/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student selects the option to view their evaluation page.		
Description:	The Student wants to view the evaluation page in order to see their results, feedback, or progress from completed activities.		
Preconditions:	PRE-1. The Student is logged into the System.		
Postconditions:	POST-1. The Student's evaluation page is displayed with the correct information.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student chooses to view the evaluation page. 2. The System retrieves the Student's evaluation data. 3. The System displays the evaluation page, including scores, feedback, and progress information. 4. The Student reviews the evaluation. 5. Use case ends. 		
Extensions:	<p>2a. No evaluation data available: The System notifies the Student that no results exist yet.</p> <p>2b. System error retrieving data: The System shows an error message and suggests retrying later.</p>		
Priority:	Medium		
Frequency of Use:	Regular; Students may access their evaluation page after each activity.		
Business Rules:			
Associated Information:	Evaluation details: activity name, date, score, feedback, cumulative progress.		
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 29: Student Request Labs from Diagnostic Agent

UC ID and Name:	UC-29: User Request Labs from Diagnostic Agent		
Created By:	Chris Musselman	Date Created:	10/23/25
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to request labs from diagnostic agent.		
Description:	The Student wants to request labs for the patient from the diagnostic agent, so that the student can progress in the case.		
Preconditions:	PRE-1. The student is currently playing an Active case.		
Postconditions:			
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to request labs from diagnostic agent. 2. The Game Master agent routes the request to diagnostic agent. 3. The Diagnostic agent fetches lab results from the case database. 4. The Game Master agent routes the lab results to the student. 5. Use case ends. 		
Extensions:			
Priority:	High		
Frequency of Use:	Approximately all users, average of 10 usages per week.		
Business Rules:	Security/access concerns.		
Associated Information:	The Student shall be able to cancel the use case at any time prior to submitting it.		
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 30: Student Communicates with Mentor Agent

UC ID and Name:	UC-30: Student Communicates with Mentor Agent		
Created By:	Alex Canales	Date Created:	10/23/25
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to communicate with the mentor agent to get insight from the mentor agent.		
Description:	The Student wants to request to communicate with the mentor agent to get clarity about what may have been presented in the introduction portion so that the student can get further information in the case.		
Preconditions:	PRE-1. The student is currently playing an Active case.		
Postconditions:			
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to speak with the mentor agent. 2. The Game Master agent routes the request to the mentor agent. 3. The mentor agent fetches the resulting answer from the case database. 4. The Game Master agent routes the results to the student. 5. Use case ends. 		
Extensions:			
Priority:	High		
Frequency of Use:	Approximately all users, average of 20 usages per week.		
Business Rules:	Security/access concerns.		
Associated Information:			
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 31: Instructor adds Case to A Classroom

UC ID and Name:	UC-31: Instructor adds case to a classroom		
Created By:	Alex Canales	Date Created:	10/24/25
Primary Actor:	Instructor	Secondary Actors:	
Trigger:	The Instructor indicates to add a case of available cases to the classroom that the Instructor has created		
Description:	The Instructor wants to request to add a case to the classroom. This is to add cases to the classroom and allow the flexibility of the Instructor to add which cases to the classrooms that he likes.		
Preconditions:	PRE-1. The Instructor has permission to see available use cases that the Instructor can access.		
Postconditions:			
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Instructor indicates to add a case to a classroom. 2. The request to the case is sent to the System. 3. The System fetches the resulting case from the case database. 4. The System routes the resulting case to the respective Instructor's Classroom. 5. Use case ends. 		
Extensions:	2a. The routing to the cases API is not successful: 2a1. The request is not fulfilled 2a2. The error message is sent back to the Instructor		
Priority:	High		
Frequency of Use:	Approximately all users, average of 20 usages per week.		
Business Rules:	Security/access concerns.		
Associated Information:			
Related Use Cases			
Assumptions:			
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 32: The Student Edit User Account Details

UC ID and Name:	UC-32: Student edit account details		
Created By:	Alex Canales	Date Created:	10/26/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to edit the account		
Description:	The Student wants to edit the account, so that the student can update new information		
Preconditions:	PRE-1. The student has an account.		
Postconditions:	POST-1. The Student new account information is set up.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to edit in the user account 2. The System opens a new page and asks the Student to edit the details of this new account according to the “Details” defined in the Associated Information of this use case. 3. The Student enters the details of this new account and confirms that she has finished. 4. The System validates the Student’s inputs according to the “Details” defined in the Associated Information of this use case. 5. The System displays the details of the new account and asks the Student to confirm the registration. 6. The Student either confirms the registration (continues the normal flow) or chooses to modify the details (return to step 3). 7. The System saves the information about the new account and informs the Student that this account has been created. 8. The System redirects the Student to the login page. 9. Use case ends. 		
Extensions:	<p>2a. The Student did not change any details:</p> <p>2a1. The System alerts the Student that details entered did not change and are the same</p> <p>2a2. The System redirects the Student to the edit page.</p> <p>2a3. Use case ends.</p> <p>4a. Input validation rule violation:</p> <p>4a1. The System alerts the Student that an input validation rule is violated and displays the nature and location of the error.</p> <p>4a2. The Student corrects the mistake and returns to step 4 of the normal flow.</p>		
Priority:	Low		
Frequency of Use:	Approximately 60-240 users, 1 usage per year.		
Business Rules:			
Associated Information:	<p>Details:</p> <ul style="list-style-type: none"> ● First name ● Last name ● MS Year Number ● School ● Email ● Password ● Reenter password: must be the same as password ● <i>Nickname</i> 		
Related Use Cases			
Assumptions:	System assigns nickname to the student		
Open Issues:			

DiseaseQuest	Version: 2.0
Use Cases	Date: 04/15/2026

Use Case 33: The Student/Instructor views Leaderboard

UC ID and Name:	UC-33: View Leaderboard																							
Created By:	Carlota Castellort Pinto	Date Created:	10/26/2025																					
Primary Actor:	Student, Instructor	Secondary Actors:																						
Trigger:	The User indicates to view the leaderboard																							
Description:	The User wants to view the leaderboard, so that he can get a better idea of his progress compared to others.																							
Preconditions:	PRE-1. The User is logged into the System.																							
Postconditions:	POST-1. The details of the specified leaderboard are displayed to the User .																							
Main Success Scenario:	<ol style="list-style-type: none"> 1. The User indicates to view the leaderboard. 2. The User chooses to view the details of one specific classroom’s leaderboard. 3. The System retrieves and displays the details of this classroom leaderboard according to the “Details” defined in the Associated Information and the “Security/access concerns” defined in the Business Rules of this use case. 4. The User views the details of the leaderboard. 5. Use case ends. 																							
Extensions:																								
Priority:	High																							
Frequency of Use:	+50 users, average of 5 usages per week.																							
Business Rules:	BR-8: All personal data (student identity, performance metrics, simulations logs) must remain confidential and only be used only for academic evaluation within DiseaseQuest.																							
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Rank</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Nickname</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Score</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Property name	Data type	Editability	Security/access concerns	Reference to glossary	Rank	Integer				Nickname	String				Score	Integer			
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Rank	Integer																							
Nickname	String																							
Score	Integer																							
Related Use Cases:																								
Assumptions:	The Student is assigned a nickname when their account is created.																							
Open Issues:																								

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Use Case 34: The Admin views Leaderboard

UC ID and Name:	UC-34: Admin views Leaderboard																																	
Created By:	Carlota Castellort Pinto	Date Created:	10/26/2025																															
Primary Actor:	Admin	Secondary Actors:																																
Trigger:	The Admin indicates to view the leaderboard																																	
Description:	The Admin wants to view the leaderboard, so that he can get a better idea of the progress of the students.																																	
Preconditions:	PRE-1. The Admin is logged into the System.																																	
Postconditions:	POST-1. The details of the specified leaderboard are displayed to the Admin.																																	
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Admin indicates to view the leaderboard. 2. The Admin chooses to view the details of one specific classroom's leaderboard. 3. The System retrieves and displays the details of this classroom leaderboard according to the "Details" defined in the Associated Information and the "Security/access concerns" defined in the Business Rules of this use case. 4. The Admin views the details of the leaderboard. 5. Use case ends. 																																	
Extensions:																																		
Priority:	High																																	
Frequency of Use:	2 users, average of 5 usages per week.																																	
Business Rules:																																		
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Rank</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Name</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Nickname</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Score</td> <td>Integer</td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Rank	Integer				Name	String				Nickname	String				Score	Integer			
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Related Use Cases:																																		
Assumptions:	The Student is assigned a nickname when their account is created.																																	
Open Issues:																																		

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Use Case 35: Student views the reflection document

UC ID and Name:	UC-35: Student views the reflection document		
Created By:	Dylan Noall	Date Created:	10/23/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student indicates to view the reflection document.		
Description:	The Student wants to view the reflection document provided at the end of a case in order to review their performance and see how they might improve.		
Preconditions:	PRE-1. The Student must have a valid account and be logged in. PRE-2. The Student must have completed an entire case study.		
Postconditions:			
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student indicates to view the reflection document. 2. The System generates the reflection document based on the performance of the student in the case. 3. The System displays the reflection document to the Student. 4. The Student reads the reflection document and acknowledges it. 5. Use case ends. 		
Extensions:	4a. Student indicates to download the reflection document: 5a1. The System downloads the reflection document to the user's local machine. 5a2. Use case ends.		
Priority:	High		
Frequency of Use:	Approximately 60–240 uses; at the end of each case completion.		
Business Rules:			
Associated Information:			
Related Use Cases	<u>UC-28: Student views evaluation page</u>		
Assumptions:			
Open Issues:			

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Use Case 36: The Student asks the Patient Agent for information

UC ID and Name:	UC-35: The Student asks the Patient Agent for information																												
Created By:	Kavish Soningra	Date Created:	10/26/2025																										
Primary Actor:	Student	Secondary Actors:	Patient Agent (System)																										
Trigger:	The Student indicates to ask the Patient Agent for information.																												
Description:	The Student wants to request information from the Patient Agent to better understand a specific medical condition, patient case, or treatment workflow. The Patient Agent retrieves relevant data from its connected sources (e.g., EHR knowledge graph, TEFCA exchange data, or case database) and provides an accurate, context-aware response.																												
Preconditions:	PRE-1. The Student is logged into the system. PRE-2. The Patient Agent is online and authorized to access the requested information.																												
Postconditions:	POST-1. The Student receives the requested information. POST-2. The interaction is logged for audit and feedback improvement.																												
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student initiates a query to the Patient Agent (e.g., “Tell me about Type II Diabetes symptoms”). 2. The System verifies the Student’s authentication and access rights. 3. The System interprets the query and searches the knowledge graph or connected EHR data. 4. The Patient Agent retrieves relevant medical details (e.g., symptoms, treatments, or research summaries). 5. The Agent structures the response clearly and displays it to the Student. 6. The System logs the interaction for audit and continuous learning. 7. Use case ends. 																												
Extensions:	E1: Requested data not found → System returns “No relevant information available.” E2: Patient Agent service unavailable → System notifies “Service temporarily unavailable.” E3: Unauthorized data access attempt → System denies access and alerts admin.																												
Priority:	High																												
Frequency of Use:	Daily (students frequently query Patient Agent during study or clinical case sessions).																												
Business Rules:																													
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Query</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Timestamp</td> <td>Datetime</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Response</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Source</td> <td>String</td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Property name	Data type	Editability	Security/access concerns	Reference to glossary	Query	String				Timestamp	Datetime				Response	String				Source	String			
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Use Case 37: Student views their own statistics via the dashboard

UC ID and Name:	UC-37: Student views their own statistics via the dashboard		
Created By:	Rahul Shrestha	Date Created:	10/28/2025
Primary Actor:	Student	Secondary Actors:	
Trigger:	The Student selects the “View Statistics” or “Dashboard” option.		
Description:	The Student wants to view their personal academic statistics and progress information through the dashboard. This includes metrics such as completed activities, performance averages, classroom engagement, and progress summaries, helping them understand their overall performance.		
Preconditions:	PRE-1. The Student must have a valid account and be logged into the system. PRE-2. The Student must be enrolled in at least one classroom or activity. PRE-3. The System must have sufficient data recorded for the student’s performance metrics.		
Postconditions:	POST-1. The Student successfully views their dashboard statistics.		
Main Success Scenario:	<ol style="list-style-type: none"> 1. The Student logs into the system and navigates to the dashboard. 2. The Student selects the option to view personal statistics. 3. The System retrieves the student’s performance data from the database. 4. The System compiles and displays key statistics (e.g., average scores, completed tasks, participation, etc.). 5. The Student reviews their statistics and insights. 6. Use case ends. 		
Extensions:	<p>2a. No performance data found:</p> <p>2a1. The System alerts the Student that there are no recorded statistics available yet.</p> <p>2a2. Use case ends.</p> <p>3a. Data retrieval error:</p> <p>3a1. The System displays an error message indicating that data could not be retrieved.</p> <p>3a2. The Student may retry later.</p> <p>4a. Student not enrolled in any classroom:</p> <p>4a1. The System notifies the Student that statistics cannot be displayed without classroom enrollment.</p> <p>4a2. The Student may join a classroom to access their dashboard.</p>		
Priority:	Medium		
Frequency of Use:	Frequently - Students may check their dashboard daily or weekly to track progress and review updates.		
Business Rules:	All personal data (student identity, performance metrics, and simulation logs) must remain confidential and be used only for academic evaluation within DiseaseQuest (DQ) .		
Associated Information:	<p>Details</p> <ul style="list-style-type: none"> ● Student ID ● Classroom ID ● Performance Data (scores, completed tasks, engagement metric, etc) ● Dashboard summary ● Simulation logs 		
Related Use Cases	UC-NUMBER: Student views introduction UC-NUMBER: Student views classroom content		
Assumptions:	Dashboard data is securely retrieved. Access permissions restrict visibility to only the logged-in Student.		
Open Issues:			

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Business Rules

BR-1: Users that receive invites must be sent via an '.edu' email to ensure enrollment in University.

BR-2: Users that receive invites must accept the invite link to the classroom within 1 week before the link is invalid.

BR-3: All patient cases uploaded by admins must work to ensure that all FERPA/HIPAA guidelines are followed.

BR-4: Classrooms that Instructors create will expire 1 week before the start of the next semester to remove students from the classroom.

BR-5: Classrooms that have expired can be brought back by the same professor with a set of no included students, and invite links must be resent to the students for the given semester.

BR-6: Each classroom must have at least 1 instructor.

BR-7: Students can only access cases that are associated with their classes.

BR-8: All personal data (student identity, performance metrics, simulations logs) must remain confidential and only be used only for academic evaluation within DiseaseQuest.